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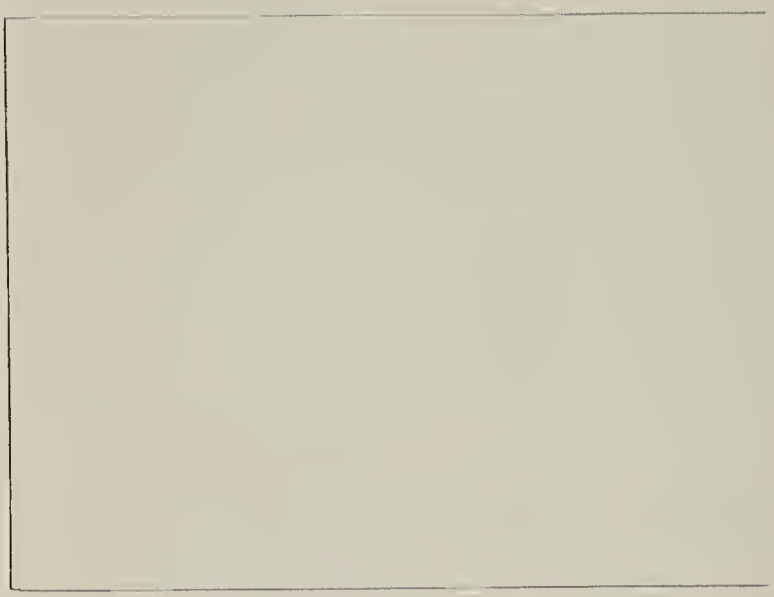
JOINT HIGHWAY RESEARCH PROJECT

JHRP-87/10

TRAFFIC SPEED REPORT NO. 121

David L. Cochran
Leroy Gray

PURDUE UNIVERSITY



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TRAFFIC SPEED REPORT NO. 121

David L. Cochran
Leroy Gray

TRAFFIC SPEED REPORT NO. 121

To: Harold L. Michael, Director
Joint Highway Research Project

From: David L. Cochran, Engr. Tech.
Joint Highway Research Project

November 19, 1987

File: 8 - 3 - 3

Project: C - 36 - 10C

The attached Progress Report No. 121 is the report of the May-August 1987 study of free flow automobile and truck speeds on tangent, level and dry sections of rural interstate, rural 4-lane, rural 2-lane and urban interstate highways in Indiana. This report was prepared by David L. Cochran. Data were collected by David Cochran with the assistance of Leroy Gray.

The results of this report show that all types of vehicles, on all types of Indiana highways, had an average free flow speed of 59.3 mph in 1987. This indicates an increase of 0.7 mph from 1986. If the two urban interstates are excluded, the average speed on all types of rural highways in Indiana becomes 59.1 mph in 1987. This also represents an increase of 0.7 mph from 1986. All types of vehicles on rural interstate highways had an average speed of 62.3 mph, which is up by 2.2 mph from 1986. This is not unexpected, due to the implementation of the 65 mph speed limit on Indiana rural interstate highways effective June 1, 1987.

This report includes a chart, Figure 2 on page 8, that graphically summarizes the results of summer free flow speed monitoring on rural highways since 1978. Table 8, on page 9, summarizes the changes in speed in 1987 from 1986. Table 9, on page 10, summarizes the changes in percent of vehicles exceeding 55, 60 and 65 mph in 1987 from 1986.

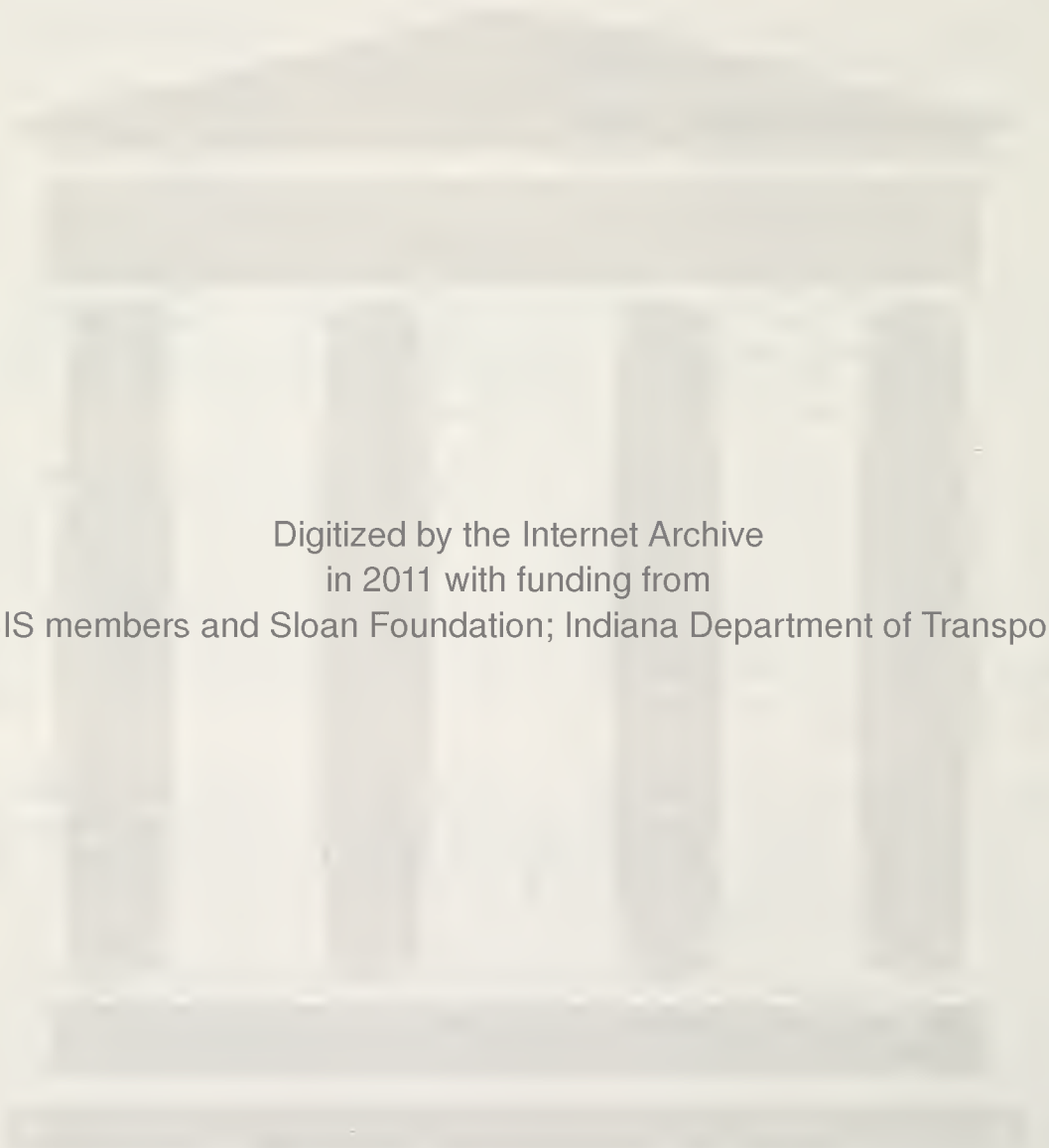
Copies of this report will be sent to the Indiana Department of Highways. Copies of this report are requested for release to the Indiana State Police and other highway safety agencies, which is normal procedure for these reports.

Respectfully submitted,

David L. Cochran

David L. Cochran
Traffic Research

cc: JHRP Board



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TRAFFIC SPEED REPORT NO. 121

by

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and

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Joint Highway Research Project
Project No.: C - 36 - 10C
File No.: 8 - 3 - 3

Prepared as Part of an Investigation
Conducted by

Joint Highway Research Project
Engineering Experiment Station,
Purdue University,

in Cooperation with the

Indiana Department of Highways

Purdue University
West Lafayette, Indiana 47907

December 1, 1987

TRAFFIC SPEED REPORT NO. 121

This report is an analysis of spot speed observations made during the 1987 summer months of May, June, July and August. All observations were made of free-flowing vehicles on level, tangent sections of rural and urban highways under favorable conditions. All observations were made during daylight hours.

This is the seventh report with exclusively summer observations since 1975. From 1976 until 1980 (Traffic Speed Reports #95 through #114), 14 primary and secondary stations, as well as another 14 randomly selected stations, were monitored every quarter in conjunction with the 55 mph speed compliance certification program performed for the Federal Highway Administration. Since 1981 the State and Federal studies have been conducted separately.

Fourteen speed monitoring stations were used for the 1987 Traffic Speed Report calculations. These stations are divided into four categories which include: four rural interstate locations, four rural four-lane locations, four rural two-lane locations and two urban interstate locations. These 14 stations are the same as the primary and secondary control stations monitored since 1975 in Indiana. Prior to 1975, only the 12 rural stations were monitored. The locations of the 12 rural stations are essentially the same since 1970 except for stations 4L-32 (formerly number 6 on US 52) and 2L-54 (formerly number 11 on US 31), which changed in 1975.

The speed limit at all the stations is 55 mph, except the rural interstate locations, which were reposted for 65 mph beginning June 1, 1987. The site locations are given in Table 1 and shown in Figure 1.

The vehicles were classified as Indiana or Non-Indiana passenger cars and light trucks (less than 5000 lbs. gross weight) or heavy trucks (equal to or more than 5000 lbs. gross weight). Computer analysis was performed for each vehicle classification, and for combined passenger cars and combined trucks.

1. Sample Size

At each station, a minimum of 200 vehicles in each direction were recorded using the free flow technique at that location. At least 25 of these vehicles, in each direction, were required to be heavy trucks.

2. Equipment and Field Procedure

The observations for this study were obtained by use of a Kustom Signals Model HR-8 K-Band radar gun. The burst method, using the on/off switch, was used to record speeds. This method was used to avoid early detection by radar detectors. Speeds were taken from within a van parked on the right shoulder

Table 1: Monitoring Locations

Rural Interstate Highways		
RI-06	I-65	7.5 miles North of SR 160, mile marker 22
RI-12	I-74	4.0 miles West of SR 9, mile marker 108.8
RI-21	I-69	1.6 miles South of SR 18, mile marker 62
RI-34	I-65	2.0 miles South of SR 39, mile marker 135
4-Lane Highways		
4L-17	US 52	2.0 miles East of US 231
4L-20	US 41	1.0 mile North of SR 2
4L-21	US 31	0.8 mile North of SR 38
4L-32	US 30	3.7 miles West of US 421
2-Lane Highways		
2L-18	US 35	1.9 miles East of I-69
2L-54	US 231	1.1 miles South of SR 234
2L-79	SR 25	0.7 mile South of Americus
2L-91	SR 43	2.0 miles South of Chalmers
Urban Interstate Highways		
UI-01	I-94	West of Burr St. interchange, mile post 5.9
UI-06	I-65	Just South of White River, mile marker 116.8

of the road or parked in an access driveway to the road. The observers were equipped with a CB radio to monitor possible radio notification of speed measurement and of police vehicles in the area. When radar speed recording was detected, and subsequently broadcast on the CB radio, speeds were not taken for at least 5 minutes. This problem occurred primarily on interstate highways.

The accuracy of the radar gun was checked at the beginning and end of each data recording session. The calibration was also confirmed every time the sampling technique was changed, and at other times when deemed necessary.

3. Results of Analysis

The free flow data collected were analyzed and are summarized for each station in Tables A1 through A14 in the Appendix. Tables A15 through A18 summarize the free flow data by highway classification. Table A19 is the summary for all 14 stations. Table A20 is the summary for all 12 rural highway classifications.

The results of the free flow data, categorized by highway classification and vehicle type, are shown in Table 2 through Table 5.

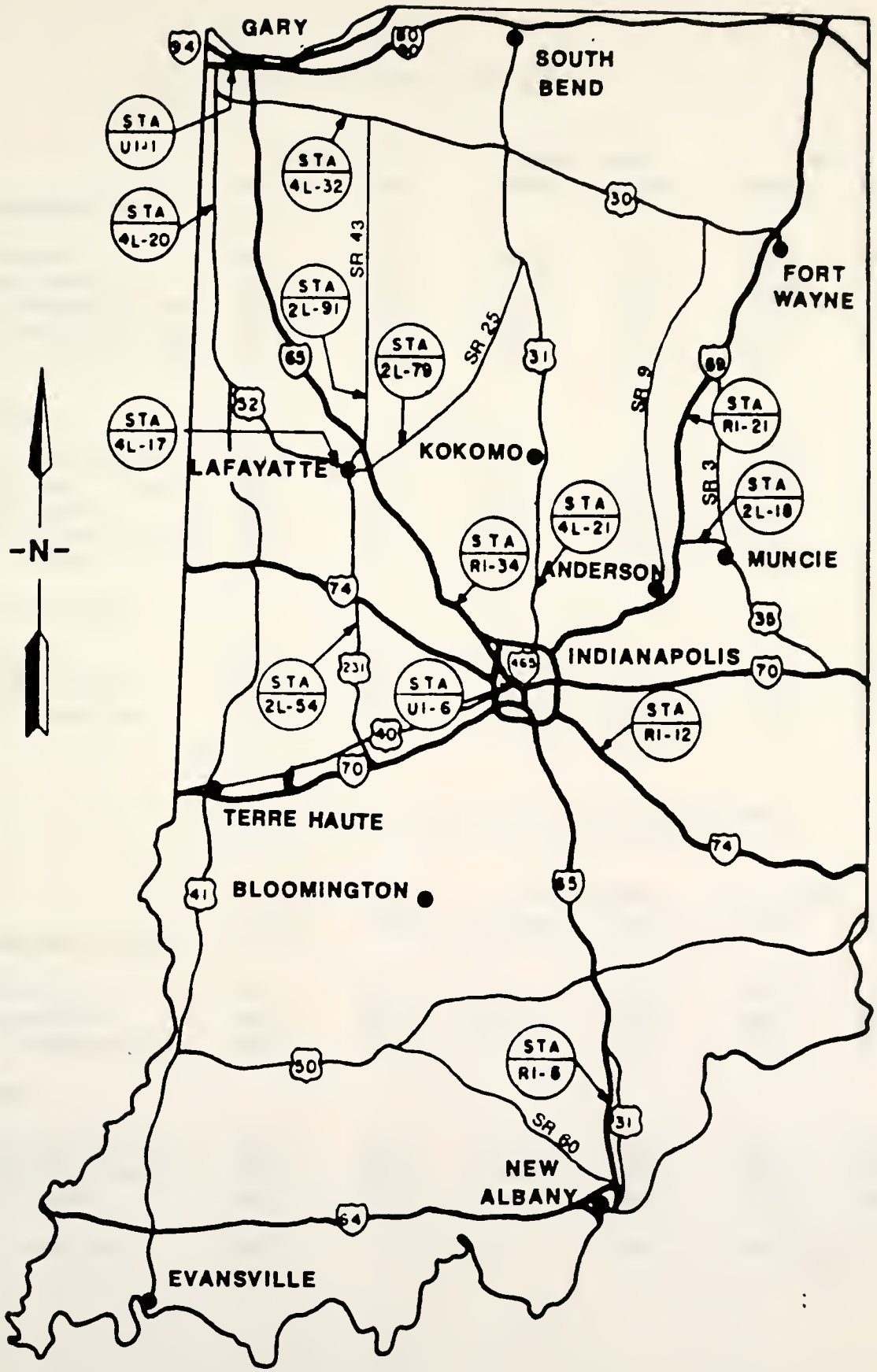

FIGURE 1. LOCATION OF SPEED-STUDY STATIONS

Table 2: Average Speed (MPH)

	Interstate		Other Rural		All	
	Urban	Rural	4-Lane	2-Lane	Sites	Rural
Passenger Cars:						
Indiana	60.3	62.5	58.6	57.3	59.3	59.0
Non-Indiana	61.2	63.4	60.8	57.4	61.9	62.0
All Passenger Cars	60.5	62.9	59.1	57.3	59.9	59.8
85 Percentile (All)	64.3	57.6	63.6	61.6	65.0	65.2
15 Percentile (All)	55.7	66.9	53.5	51.8	53.9	53.5
Trucks:						
Less than 5000 lbs.	60.2	61.9	57.7	56.3	58.7	58.4
5000 lbs. or more	58.0	61.0	57.2	55.4	57.9	57.9
All Trucks	59.2	61.4	57.5	55.9	58.3	58.2
85 Percentile (All)	62.5	65.3	62.1	60.5	63.2	63.4
15 Percentile (All)	54.4	56.3	52.1	50.3	52.6	52.3
All Vehicles:						
Average	60.0	62.3	58.4	56.7	59.3	59.1
85 Percentile	63.7	66.4	63.0	61.2	64.3	64.5
15 Percentile	55.3	56.9	52.9	51.2	53.3	53.0

Table 3: Percent of Vehicles Exceeding 55 MPH

	Interstate		Other Rural		All	
	Urban	Rural	4-Lane	2-Lane	Sites	Rural
Passenger Cars:						
Indiana	87.4	92.7	73.1	62.9	76.3	73.8
Non-Indiana	96.1	93.7	86.2	59.2	89.1	87.9
All Passenger Cars	89.2	93.1	76.1	62.6	79.5	77.4
Trucks:						
Less than 5000 lbs.	88.3	89.3	64.7	56.6	72.2	69.2
5000 lbs or more	76.2	90.7	63.2	52.0	70.0	68.8
All Trucks	82.5	90.0	64.1	54.4	71.2	69.0
All Vehicles:	86.7	91.9	71.1	59.2	76.1	74.0

Table 4: Percent of Vehicles Exceeding 60 MPH

	Interstate		Other Rural		All	
	Urban	Rural	4-Lane	2-Lane	Sites	Rural
Passenger Cars:						
Indiana	44.1	67.0	35.7	23.4	39.5	38.4
Non-Indiana	54.8	75.5	46.0	28.6	61.0	62.0
All Passenger Cars	46.4	71.0	38.0	23.8	44.9	44.6
Trucks:						
Less than 5000 lbs.	49.0	63.8	26.2	20.8	37.6	35.5
5000 lbs. or more	25.1	56.2	24.9	13.4	30.6	31.7
All Trucks	37.4	60.0	25.7	17.3	34.3	33.8
All Vehicles:	43.0	66.3	32.9	21.1	40.6	40.1

Table 5: Percent of Vehicles Exceeding 65 MPH

	Interstate		Other Rural		All	
	Urban	Rural	4-Lane	2-Lane	Sites	Rural
Passenger Cars:						
Indiana	11.5	27.2	8.8	5.1	11.8	11.8
Non-Indiana	12.3	34.4	18.4	6.1	24.7	26.8
All Passenger Cars	11.7	30.5	11.0	5.2	15.0	15.7
Trucks:						
Less than 5000 lbs.	9.2	20.9	7.9	3.6	10.1	10.3
5000 lbs. or more	1.3	12.1	3.3	2.3	5.2	6.0
All Trucks	5.4	16.5	6.0	3.0	7.9	8.3
All Vehicles:	9.3	25.0	8.9	4.2	12.1	12.7

The results of this study, and similar studies conducted since 1978, are tabulated in Table 6. The speed values for 1978 were calculated from the tables given in the appendix of report number 106 for the 14 locations used in this study. The 15th and 85th percentile speed values for 1979 through 1987 were calculated by interpolation over 1 mph speed intervals from the raw data.

Table 6: Summary of Spot Speed Observations on Indiana Highways (Free-Moving Vehicles on Level, Tangent Sections)

	Passenger Cars				Trucks				Combined	
	Ind. Mean	Non-Ind. Mean	All Mean	All 85%	Lgt. Mean	Hvy. Mean	All Mean	All 85%	All Mean	All 85%
2-Lane:										
1978	56.8	57.1	56.8	61.9	55.4	55.9	55.2	61.1	55.7	61.3
1979	56.4	56.0	56.4	60.5	55.1	55.6	55.6	61.1	55.4	61.4
1980	55.2	58.4	55.3	59.7	55.1	54.9	54.9	60.2	55.0	60.2
1981	55.7	56.2	55.8	60.2	55.0	54.7	54.8	59.9	54.8	59.9
1982	55.8	57.2	56.0	60.2	54.8	54.9	54.9	59.7	54.9	60.0
1983	56.3	55.8	56.2	60.7	55.0	54.6	54.8	59.3	55.7	60.2
1984	56.5	56.9	56.6	60.9	55.2	55.1	55.2	59.8	56.0	60.4
1985	55.8	55.5	55.7	60.5	55.4	53.9	54.8	55.4	55.4	60.1
1986	57.1	58.2	57.2	61.5	56.5	55.6	56.2	60.4	56.8	61.1
1987	57.3	57.4	57.3	61.6	56.3	55.4	55.9	60.5	56.7	61.2
4-Lane:										
1978	57.5	57.8	57.5	62.5	56.0	57.7	56.9	61.5	56.9	62.1
1979	56.3	57.0	56.5	61.1	55.7	56.4	56.5	62.3	56.1	61.6
1980	55.9	57.4	56.2	60.5	55.3	56.4	55.9	61.4	55.9	60.5
1981	56.5	58.0	56.8	61.1	56.3	56.1	56.2	61.5	56.2	61.0
1982	56.6	57.6	56.8	61.1	55.1	55.7	55.4	61.1	55.4	61.8
1983	57.4	58.0	57.5	61.7	56.4	56.4	56.4	61.7	57.1	61.4
1984	57.7	58.6	57.9	61.9	57.0	56.8	56.9	61.4	57.5	61.7
1985	56.9	58.3	57.2	61.3	56.3	55.4	55.8	60.6	56.7	61.0
1986	58.7	59.7	59.0	63.0	57.0	56.9	57.0	61.3	58.2	62.5
1987	58.6	60.8	59.1	63.6	57.7	57.2	57.5	62.1	58.4	63.0
Rural Interstate:										
1978	59.2	60.3	59.7	63.7	58.9	59.8	59.8	64.8	59.5	64.6
1979	58.4	58.9	58.6	62.4	57.6	59.3	59.5	64.5	58.7	64.0
1980	58.4	59.7	58.8	62.3	57.6	57.2	59.8	62.6	58.3	62.5
1981	57.9	59.6	58.6	62.3	57.4	58.8	58.4	62.9	58.4	62.4
1982	58.9	59.5	58.9	62.2	58.0	58.2	58.1	62.7	58.1	62.1
1983	59.2	60.0	59.5	63.1	58.5	58.7	58.6	62.8	59.2	62.8
1984	59.3	60.5	59.8	63.6	58.4	58.1	58.2	61.8	59.1	62.9
1985	59.2	60.1	59.5	63.6	58.0	57.6	57.7	61.7	58.9	62.9
1986	60.3	60.9	60.5	64.0	59.9	58.7	59.3	62.9	60.1	63.8
1987	62.5	63.4	62.9	66.9	61.9	61.0	61.4	65.3	62.3	66.4
Urban Interstate:										
1981	57.7	58.5	57.9	62.2	57.2	56.5	56.8	61.7	57.5	61.5
1982	57.7	57.8	57.7	61.9	56.8	55.7	56.1	61.2	57.0	62.1
1983	58.7	58.2	58.6	61.9	57.8	57.2	57.4	61.4	58.2	61.6
1984	58.8	58.4	58.7	62.8	58.1	56.4	57.0	60.7	58.0	62.1
1985	59.5	59.3	59.4	63.7	58.4	57.3	57.7	60.9	58.7	62.8
1986	60.1	60.3	60.2	64.3	59.7	58.1	59.0	62.8	59.7	63.8
1987	60.3	61.2	60.5	64.3	60.2	58.0	59.2	62.5	60.0	63.7

Figure 2 represents a graphic interpretation of the results from this, and similar studies, since 1978. The speed values plotted in Figure 2 were obtained in the same way as those in Table 6. Only data collected at the 12 rural stations were used to calculate the values in Figure 2.

Table 7 shows the average speeds for all passenger cars, trucks of more than 5000 lbs. and trucks less than 5000 lbs. with and without the two urban interstate stations. The urban interstates were first monitored in 1975.

Table 7: Average Speed (MPH)

	Passenger Cars		Trucks Less Than 5000 lbs.		Trucks 5000 lbs. or More	
Year	12 Rural Stations	All 14 Stations	12 Rural Stations	All 14 Stations	12 Rural Stations	All 14 Stations
1978	58.2	58.2	57.9	57.8	56.6	56.6
1979	57.1	61.8	57.2	57.0	56.0	56.1
1980	56.7	56.8	56.8	56.6	56.0	56.1
1981	57.0	57.1	56.7	56.3	56.1	56.6
1982	57.2	57.3	55.8	55.9	56.4	56.3
1983	57.8	57.9	56.5	56.6	56.7	56.8
1984	58.1	58.3	56.7	56.9	56.9	56.8
1985	57.4	57.7	56.4	56.7	55.9	56.2
1986	59.0	59.2	57.7	58.0	57.2	57.3
1987	59.8	59.9	58.4	58.7	57.9	57.9

4. SUMMARY

Since the mean speeds are almost the same for the 12 rural stations (Table 7) as for the 14 urban and rural stations, there is no reason to expect that the results in Figure 2 would change significantly if the urban interstate stations were included in the analysis. However, for consistency in the analysis and historical reporting, the urban interstate locations are reported only in the various tables.

The 85th percentile, mean, and 15th percentile speed changes on all rural Indiana highways are also illustrated in Figure 2. The average speed of cars, light trucks and heavy trucks have remained virtually the same since 1979. Mean and 85th percentile speeds dropped sharply from the summer of 1973 to to the summer of 1974 due to the implementation of the 55 mph speed limit.

The speeds varied slightly, up and down, from 1975 through 1978; however, some stabilization was realized from 1979 through 1982 (Figure 2). Speeds appeared to increase slightly in 1983 and 1984 above previous levels. A decrease in speeds was observed in 1985 for all categories, except for the 85th percentile speed for passenger cars on rural interstates, where no change occurred. However, all categories appeared to increase sharply in 1986.

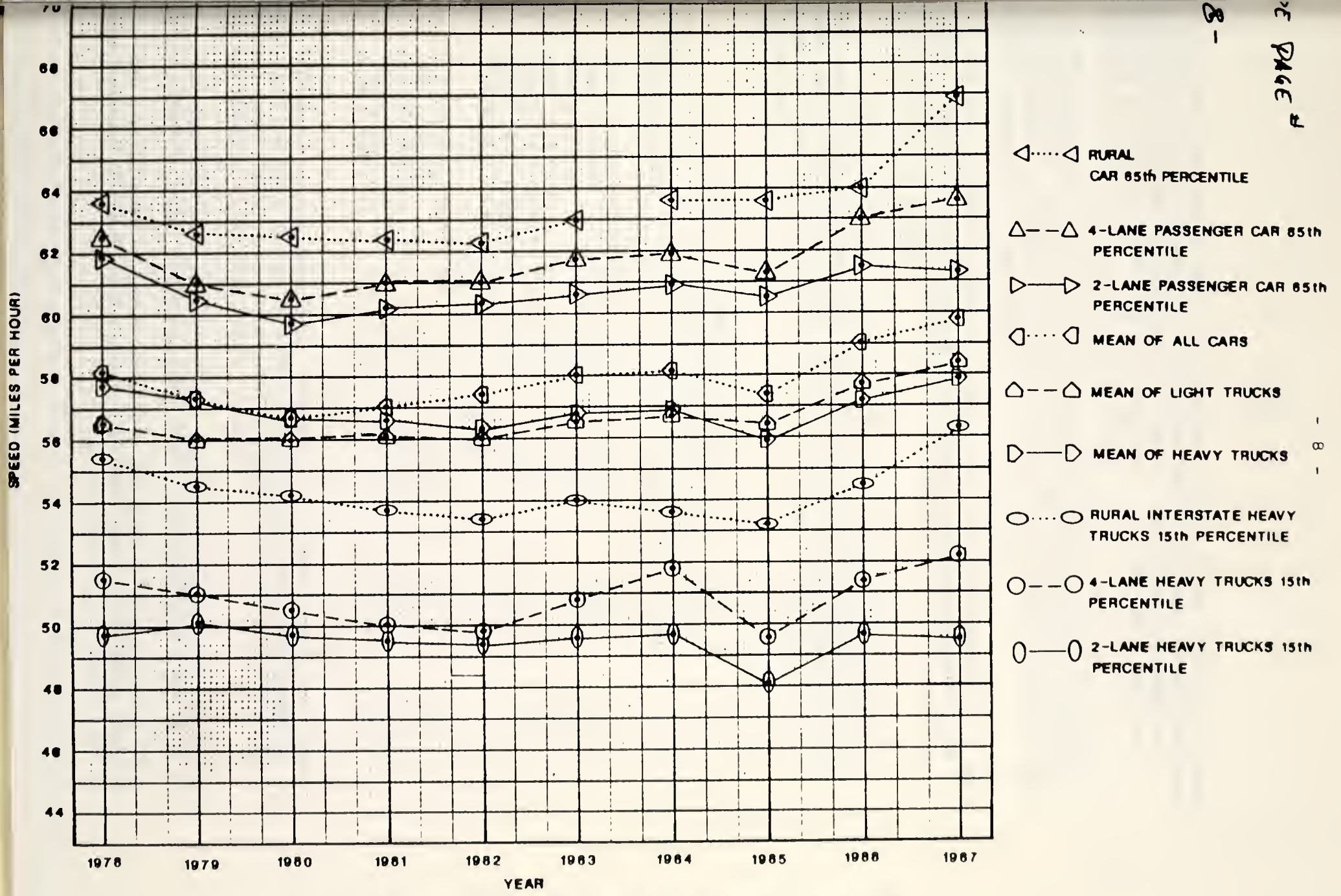

FIG. 2: INDIANA RURAL SPEED TRENDS

The 85th percentile speed for passenger cars on 4-lane highways increased slightly by 0.6 mph (Figure 2) in 1987 from 1986, while 2-lane speed decreased by 0.2 mph from 1986. An increase of 2.9 mph in 85th percentile speed was observed in 1987 from 1986 on rural interstates, in association with the increase in speed limit from 55 mph to 65 mph.

The mean speed of all three vehicle categories, on all types of rural Indiana highways, increased slightly in 1987 from 1986 (Figure 2). Passenger cars registered the largest increase at 0.8 mph, while heavy trucks and light trucks increased by 0.7 mph each.

The 15th percentile speed for heavy trucks increased sharply by 1.8 mph in 1987 from 1986 levels (Figure 2) in the rural interstate category. An increase of 0.8 mph was observed on 4-lane highways, while a 0.2 mph decrease occurred on 2-lane highways.

A tabulation of speed changes in 1987 from 1986 is listed in Table 8. The rural interstate highways showed large speed increases (Table 8) in all three vehicle categories in 1987 from 1986. Passenger cars registered the largest increase at 2.4 mph, while light trucks and heavy trucks increased by 2.0 mph each.

Table 8: Summary of Changes in Speed (MPH) in 1987 from 1986

Speed Category:	All Cars	L Trucks	H Trucks	All Veh.
Mean (Rural Interstate)	+ 2.4	+ 2.0	+ 2.0	+ 2.2
Mean (4-Lane)	+ 0.1	+ 0.7	+ 0.3	+ 0.2
Mean (2-Lane)	+ 0.1	- 0.2	- 0.2	- 0.1
Mean (All Rural)	+ 0.8	+ 0.7	+ 0.7	+ 0.7
15th % (All Rural)	- 0.3	0.0	+ 0.4	- 0.2
Median (All Rural)	+ 0.8	+ 0.6	+ 0.6	+ 0.7
85th % (All Rural)	+ 2.0	+ 1.6	+ 1.6	+ 1.8
Mean (Urban Interstate)	+ 0.3	+ 0.5	- 1.1	+ 0.3
Mean (All-14)	+ 0.7	+ 0.7	+ 0.6	+ 0.7
15th % (All-14)	- 0.1	+ 0.2	+ 0.2	- 0.1
Median (All-14)	+ 0.7	+ 0.8	+ 0.4	+ 0.7
85th % (All-14)	+ 1.6	+ 1.3	+ 1.2	+ 1.4

All three vehicle categories: passenger cars, light trucks (less than 5000 lbs.) and heavy trucks (greater than 5000 lbs.), showed increases in average speed (Table 8) on Indiana 4-lane highways. The largest increase of 0.7 mph occurred in the light truck category.

Only passenger cars showed a slight increase by 0.1 mph on rural Indiana 2-lane highways. Light trucks and heavy trucks decreased by 0.2 mph each.

The average speed of passenger cars on all types of rural Indiana highways increased (Table 8) by 0.8 mph in 1987 from 1986. The average speed of

cars increased slightly by 0.1 mph on 4-lane highways and 2-lane highways; while an increase of 2.4 mph was observed on rural interstates. The 85th percentile speed of passenger cars on all types of rural Indiana highways also increased by 2.0 mph from 1986.

The average speed of light trucks (less than 5000 lbs.) on all types of rural Indiana highways increased (Table 8) by 0.7 mph in 1987 from 1986. The largest increase in speed of 2.0 mph was observed on rural interstates; while 4-lane highways increased by 0.7 mph. The average speed on 2-lane highways decreased by 0.2 mph. The 85th percentile speed of light trucks on all types of rural Indiana highways increased by 1.6 mph from 1986.

Table 9: Summary of Changes in Percent Greater Than Speed in 1987 from 1986

		% > 55	% > 60	% > 65
Rural Interstate	All Cars	+ 3.1	+21.8	+20.8
	Light Trucks	+ 4.8	+23.8	+10.8
	Heavy Trucks	+ 9.1	+27.3	+ 7.0
	All Vehicles	+ 4.4	+22.2	+16.0
Rural 4-Lane	All Cars	- 1.6	+ 3.4	+ 2.9
	Light Trucks	+ 3.0	+ 3.7	+ 2.8
	Heavy Trucks	- 2.3	+ 4.2	+ 0.2
	All Vehicles	- 1.2	+ 3.9	+ 2.2
Rural 2-Lane	All Cars	- 0.5	+ 1.0	+ 0.2
	Light Trucks	- 4.2	+ 4.5	+ 1.0
	Heavy Trucks	+ 1.2	- 4.1	- 0.4
	All Vehicles	- 1.6	+ 0.6	- 0.3
Urban Interstate	All Cars	+ 3.1	+ 0.8	+ 1.4
	Light Trucks	+ 4.5	+ 5.2	0.0
	Heavy Trucks	+ 0.1	+ 1.6	- 1.4
	All Vehicles	+ 2.9	+ 1.8	+ 0.6
All Rural	All Cars	- 0.2	+ 8.4	+ 8.0
	Light Trucks	+ 0.7	+ 9.6	+ 3.8
	Heavy Trucks	+ 1.6	+ 8.9	+ 2.3
	All Vehicles	0.0	+ 8.2	+ 5.9
All Stations	All Cars	+ 0.6	+ 7.3	+ 6.9
	Light Trucks	+ 1.4	+ 9.1	+ 3.2
	Heavy Trucks	+ 1.2	+ 7.7	+ 1.7
	All Vehicles	+ 0.6	+ 7.3	+ 5.0

The average speed of heavy trucks (5000 lbs. or more) on all types of rural Indiana highways increased (Table 8) by 0.7 mph in 1987 from 1986. The largest increase in speed of 2.0 mph was noticed on rural interstate highways, while a slight increase of 0.3 mph was observed on 4-lane highways. A slight

decrease in average speed of 0.2 mph was observed on 2-lane highways. The 85th percentile speed of heavy trucks on all types of rural Indiana highways increased by 1.6 mph from 1986.

The mean speed for all vehicles on all types of rural Indiana highways increased slightly (Table 8) in 1987 from 1986 by 0.7 mph. If the urban interstate locations are included in the analysis, the mean speed for all types of vehicles on all types of Indiana highways also increased by 0.7 mph in 1987 from 1986.

The 85th percentile speed for all vehicles on all types of rural Indiana highways increased (Table 8) in 1987 from 1986 by 1.8 mph. If the urban interstate locations are included in the analysis, the 85th percentile speed for all types of vehicles on all types of Indiana highways increased by 1.4 mph in 1987 from 1986.

A summary of changes in percent of vehicles exceeding 55, 60 and 65 mph in 1987 from 1986 is tabulated in Table 9. The largest increase in percent greater than speed in 1987 was observed by heavy trucks on Indiana rural interstate highways at 27.3% > 60 mph (figure 9). Light trucks increased 23.8% > 60 mph, while cars increased by 21.8% > 60 mph. All passenger cars on rural interstate highways registered an increase of 20.8% > 65 mph, followed by an increase of 10.8% > 65 mph by light trucks and 7.0% > 65 mph by heavy trucks.

For rural 4-lane highways, the largest increase in percent greater than speed in 1987 was noticed at 4.2% > 60 mph by heavy trucks (figure 9). Light trucks increased by 3.7% > 60 mph, while passenger cars increased by 3.4% > 60 mph. Light trucks registered the largest increase at 3.0% > 55 mph.

For rural 2-lane highways, light trucks registered the largest increase in percent greater than speed at 4.5% > 60 mph (figure 9). Heavy trucks decreased by 4.1% > 60 mph. Heavy trucks increased by 1.2% > 55 mph and light trucks decreased by 4.2% > 55 mph.

Table 9 indicates that there is a decrease of 1.2 percent of all vehicles exceeding 55 mph on rural 4-lane highways and a decrease of 1.6 percent of all vehicles exceeding 55 mph on 2-lane highways in 1987 from 1986.

Generally speaking, it appears that speeds on rural Indiana 4-lane highways have continued a slight upward movement in 1987 from 1986 for all types of vehicles. This trend may be directly associated with the change in speed limit on rural interstate highways. However, speeds on rural 2-lane highways appear to have stabilized or decreased slightly in 1987 from 1986.

Appendix

Speed Data (Tables A1 to A20)

TABLE A1:SPEED DATA

STATION: UI-01 HIGHWAY: I-94 LOCATION: WEST OF BURR ST. INTERCHANGE, MILE MARKER 5.9

NO. OF LANES: 6 TYPE OF SURFACE: ASPHALT WEATHER: OVERCAST, BRIGI

THIS OBSERVATION
DATE: 6/11/87
TIME: 4:48 PM

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 12
DATE: 8/14/86
TIME: 3:31 PM

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION		LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT
NUMBER OF VEHICLES		320	318	169	226	151	92	276	222	141	87	135	135
AVE. SPEED (MPH)		59.50	59.66	59.00	59.12	60.07	60.97	58.29	58.61	58.90	59.87	57.64	57.79
STANDARD DEVIATION		4.111	4.143	4.096	3.963	4.067	4.303	4.186	4.053	4.820	4.769	3.297	3.285
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	44 MPH	0.	0.	0.	0.	0.	0.	0.	0.5	0.	1.1	0.	0.
	49 MPH	0.9	0.6	1.8	0.9	0.	0.	2.5	1.8	3.5	1.1	1.5	2.2
	54 MPH	11.3	9.7	13.6	11.9	8.6	4.3	15.6	15.8	16.3	12.6	14.8	17.8
	59 MPH	49.1	51.9	53.8	57.5	43.7	38.0	64.5	60.4	53.9	43.7	75.6	71.1
	64 MPH	90.0	89.0	91.7	91.2	88.1	83.7	93.8	93.7	89.4	86.2	98.5	98.5
	69 MPH	99.1	97.8	99.4	99.1	98.7	94.6	98.6	99.1	97.2	97.7	100.0	100.0
	74 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DIRECTION: EB													
# OF VEHICLES		143	151	87	117	56	34	126	104	64	46	62	58
AVERAGE SPEED		60.00	59.66	59.30	59.12	61.09	61.50	58.98	58.63	59.53	60.07	58.42	57.48
DIRECTION: WB													
# OF VEHICLES		177	167	82	109	95	58	150	118	77	41	73	77
AVERAGE SPEED		59.10	59.66	58.68	59.13	59.46	60.66	57.70	58.59	58.38	59.66	56.99	58.03

TABLE A2:SPEED DATA

STATION: UI-06 HIGHWAY: I-65 LOCATION: SOUTH OF WHITE RIVER, 116.8 MILE MARKER

NO. OF LANES: 6 TYPE OF SURFACE: CONCRETE WEATHER: CLOUDY, BRIGHT

THIS OBSERVATION
DATE: 5/7/87
TIME: 2:57 PM

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: 7/29/86
TIME: 12:28 PM

	PASSENGER CARS						TRUCKS					
	ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT
NUMBER OF VEHICLES	435	426	377	363	58	63	210	240	119	152	91	88
AVE. SPEED (MPH)	60.65	61.17	60.59	61.10	61.00	61.59	59.87	59.66	60.69	60.45	58.79	58.30
STANDARD DEVIATION	4.992	4.601	5.142	4.755	3.889	3.590	4.701	4.183	4.586	3.801	4.656	4.473
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PERCENT 44 MPH	0.	0.	0.	0.	0.	0.	0.5	0.4	0.8	0.	0.	1.1
OF 49 MPH	1.1	0.5	1.3	0.6	0.	0.	1.0	0.8	0.8	0.	1.1	2.3
VEHICLES 54 MPH	10.1	5.4	10.9	6.3	5.2	0.	13.3	10.4	9.2	6.6	18.7	17.0
TRAVELING 59 MPH	42.8	36.6	43.5	38.0	37.9	28.6	42.9	45.8	35.3	38.8	52.7	58.0
LESS THAN 64 MPH	78.4	80.0	79.0	79.6	74.1	82.5	84.3	89.2	79.0	85.5	91.2	95.5
OR 69 MPH	95.6	95.1	95.0	94.8	100.0	96.8	98.1	98.3	97.5	98.7	98.9	97.7
EQUAL TO 74 MPH	99.1	98.8	98.9	98.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
79 MPH	99.8	99.8	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DIRECTION: NB												
# OF VEHICLES	202	211	183	176	19	35	95	108	55	64	40	44
AVERAGE SPEED	60.12	61.23	60.07	61.15	60.68	61.63	59.10	59.55	60.26	60.50	57.53	58.16
DIRECTION: SB												
# OF VEHICLES	233	215	194	187	39	28	115	132	64	88	51	44
AVERAGE SPEED	61.10	61.11	61.09	61.05	61.15	61.54	60.50	59.76	61.06	60.42	59.78	58.43

TABLE A3:SPEED DATA

STATION: RI-06 HIGHWAY: I-65 LOCATION: 7.5 MILES NORTH OF SR 160, 22.0 MILE MARKER

NO. OF LANES: 4 TYPE OF SURFACE: ASPHALT WEATHER: SUNNY, BRIGHT

THIS OBSERVATION
DATE: 5/11/87
TIME: 1:49 PM

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: 8/12/86
TIME: 12:17 PM

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION		LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT
NUMBER OF VEHICLES		354	304	182	131	172	173	194	194	100	98	94	96
AVE. SPEED (MPH)		60.78	61.39	60.52	60.66	61.05	61.95	59.15	59.65	59.13	60.13	59.18	59.17
STANDARD DEVIATION		4.343	4.527	4.303	4.229	4.380	4.676	4.611	4.053	5.063	4.185	4.103	3.873
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	44 MPH	0.	0.	0.	0.	0.	0.	0.	0.5	0.	0.	0.	1.0
	49 MPH	0.3	0.3	0.5	0.8	0.	0.	1.5	0.5	2.0	0.	1.1	1.0
	54 MPH	4.5	6.3	4.4	8.4	4.7	4.6	11.3	9.8	14.0	10.2	8.5	9.4
	59 MPH	41.2	33.6	44.0	36.6	38.4	31.2	56.2	44.3	56.0	37.8	56.4	51.0
	64 MPH	81.4	75.0	83.0	80.9	79.7	70.5	84.5	90.2	81.0	87.8	88.3	92.7
	69 MPH	96.3	96.1	96.7	98.5	95.9	94.2	97.9	99.5	97.0	99.0	98.9	100.0
	74 MPH	99.4	99.7	100.0	100.0	98.8	99.4	100.0	100.0	100.0	100.0	100.0	100.0
	79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DIRECTION: NB													
# OF VEHICLES		186	153	95	68	91	85	110	85	61	48	49	37
AVERAGE SPEED		60.12	61.73	59.59	61.09	60.68	62.24	58.94	59.51	58.90	59.42	59.00	59.62
DIRECTION: SB													
# OF VEHICLES		168	151	87	63	81	88	84	109	39	50	45	59
AVERAGE SPEED		61.50	61.06	61.53	60.21	61.47	61.67	59.43	59.77	59.49	60.82	59.38	58.88

TABLE A4:SPEED DATA

STATION: RI-12 HIGHWAY: I-74 LOCATION: EAST OF I-465, 108.8 MILE MARKER

NO. OF LANES: 4 TYPE OF SURFACE: ASPHALT WEATHER: SUNNY, CLEAR

THIS OBSERVATION
DATE: 6/10/87
TIME: 3:44 PM

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: 6/5/86
TIME: 11:40 AM

	PASSENGER CARS						TRUCKS					
	ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT
NUMBER OF VEHICLES	383	316	243	213	140	103	228	170	129	98	99	72
AVE. SPEED (MPH)	60.28	63.72	59.93	63.41	60.90	64.36	59.71	61.83	60.74	62.55	58.36	60.85
STANDARD DEVIATION	4.065	4.432	4.102	4.600	3.939	4.009	4.411	4.255	4.614	4.686	3.748	3.376
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PERCENT 44 MPH	0.3	0.	0.	0.	0.7	0.	0.	0.	0.	0.	0.	0.
OF 49 MPH	0.8	0.6	0.8	0.5	0.7	1.0	0.9	0.	0.8	0.	1.0	0.
VEHICLES 54 MPH	6.3	3.5	7.4	4.7	4.3	1.0	9.2	4.7	5.4	6.1	14.1	2.8
TRAVELING 59 MPH	41.5	16.8	48.1	19.2	30.0	11.7	51.8	26.5	42.6	22.4	63.6	31.9
LESS THAN 64 MPH	87.7	53.5	89.3	57.7	85.0	44.7	88.2	74.1	83.7	63.3	93.9	88.9
OR 69 MPH	97.9	91.5	97.9	91.5	97.9	91.3	97.8	97.1	96.1	94.9	100.0	100.0
EQUAL TO 74 MPH	99.7	100.0	99.6	100.0	100.0	100.0	99.1	98.8	98.4	98.0	100.0	100.0
79 MPH	99.7	100.0	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DIRECTION: EB												
# OF VEHICLES	181	154	107	94	74	60	122	89	64	57	58	32
AVERAGE SPEED	60.53	63.68	59.99	63.29	61.30	64.30	60.10	61.80	61.14	62.11	58.95	61.25
DIRECTION: WB												
# OF VEHICLES	202	162	136	119	66	43	106	81	65	41	41	40
AVERAGE SPEED	60.07	63.75	59.88	63.50	60.46	64.44	59.26	61.86	60.34	63.17	57.54	60.53

TABLE A5:SPEED DATA

STATION: RI-21 HIGHWAY: I-69 LOCATION: 1.6 MILES SOUTH OF SR 18, 62.0 MILE MARKER

NO. OF LANES: 4 TYPE OF SURFACE: ASPHALT WEATHER: CLOUDY

THIS OBSERVATION
DATE: 7/9/87
TIME: 11:24 AM

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: 6/12/86
TIME: 1:44 PM

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION		LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT
NUMBER OF VEHICLES		347	284	259	125	88	159	207	192	127	88	80	104
AVE. SPEED (MPH)		60.06	63.87	60.07	63.23	60.02	64.37	58.79	61.63	59.07	61.53	58.35	61.70
STANDARD DEVIATION		4.102	4.444	3.968	4.119	4.498	4.636	3.659	4.355	3.656	4.840	3.643	3.921
	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PERCENT	44 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
OF	49 MPH	1.2	0.4	1.2	0.	1.1	0.6	0.	0.5	0.	1.1	0.	0.
VEHICLES	54 MPH	8.6	2.8	8.1	1.6	10.2	3.8	13.5	7.8	11.0	11.4	17.5	4.8
TRAVELING	59 MPH	43.5	13.0	43.2	16.0	44.3	10.7	54.6	28.6	51.2	31.8	60.0	26.0
LESS THAN	64 MPH	87.3	54.6	86.9	59.2	88.6	50.9	94.2	72.9	92.9	68.2	96.3	76.9
OR	69 MPH	99.4	91.5	100.0	95.2	97.7	88.7	99.5	97.9	99.2	97.7	100.0	98.1
EQUAL TO	74 MPH	100.0	99.3	100.0	100.0	100.0	98.7	100.0	100.0	100.0	100.0	100.0	100.0
	79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DIRECTION: NB													
# OF VEHICLES		164	137	114	62	50	75	101	94	62	48	39	46
AVERAGE SPEED		60.49	64.88	60.45	64.16	60.58	65.47	59.49	62.97	59.24	62.31	59.90	63.65
DIRECTION: SB													
# OF VEHICLES		183	147	145	63	38	84	106	98	65	40	41	58
AVERAGE SPEED		59.67	62.93	59.77	62.32	59.29	63.39	58.12	60.34	58.91	60.60	56.88	60.16

TABLE A6:SPEED DATA

STATION: RI-34 HIGHWAY: I-65 LOCATION: 2.0 MILES SOUTH OF SR 39, 135 MILE MARKER

NO. OF LANES: 4 TYPE OF SURFACE: ASPHALT WEATHER: BRIGHT, SUNNY

THIS OBSERVATION
DATE: 8/19/87
TIME: 11:25 AM

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: 6/12/86
TIME: 1:44 PM

	PASSENGER CARS						TRUCKS					
	ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT
NUMBER OF VEHICLES	409	291	243	171	166	120	210	224	109	108	101	116
AVE. SPEED (MPH)	61.00	62.71	60.76	62.23	61.34	63.40	59.61	62.48	60.45	63.06	58.71	61.95
STANDARD DEVIATION	4.145	5.071	4.290	5.165	3.911	4.874	3.757	4.804	4.093	5.034	3.135	4.536
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PERCENT 44 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
OF 49 MPH	0.	0.3	0.	0.6	0.	0.	0.	0.	0.	0.	0.	0.
VEHICLES 54 MPH	4.6	6.2	4.9	7.0	4.2	5.0	4.8	4.5	3.7	4.6	5.9	4.3
TRAVELING 59 MPH	36.2	25.1	39.5	28.7	31.3	20.0	54.8	27.2	46.8	23.1	63.4	31.0
LESS THAN 64 MPH	83.4	60.5	84.0	62.6	82.5	57.5	88.1	66.1	83.5	60.2	93.1	71.6
OR 69 MPH	95.6	91.8	95.1	92.4	96.4	90.8	98.6	93.3	97.2	89.8	100.0	96.6
EQUAL TO 74 MPH	99.8	99.3	100.0	99.4	99.4	99.2	100.0	98.7	100.0	99.1	100.0	98.3
79 MPH	100.0	99.7	100.0	99.4	100.0	100.0	100.0	99.6	100.0	99.1	100.0	100.0
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DIRECTION: NB												
# OF VEHICLES	191	140	103	84	88	56	98	111	50	46	48	65
AVERAGE SPEED	60.97	60.89	60.51	60.37	61.51	61.68	59.24	61.12	59.82	62.30	58.65	60.28
DIRECTION: SB												
# OF VEHICLES	218	151	140	87	78	64	112	113	59	62	53	51
AVERAGE SPEED	61.03	64.40	60.96	64.03	61.15	64.91	59.94	63.82	60.98	63.61	58.77	64.08

TABLE A7:SPEED DATA

STATION: 4L-17 HIGHWAY: US 52 LOCATION: 2.0 MILES EAST OF US 231

NO. OF LANES: 4 TYPE OF SURFACE: ASPHALT WEATHER: BRIGHT, CLEAR

THIS OBSERVATION
DATE: 6/18/87
TIME: 12:33 PM

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: 5/21/86
TIME: 10:00 AM

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION		LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT
NUMBER OF VEHICLES		404	327	366	290	38	37	228	197	176	145	52	52
AVE. SPEED (MPH)		58.25	58.74	58.24	58.31	58.40	62.08	56.62	56.95	56.91	57.10	55.65	56.54
STANDARD DEVIATION		4.856	5.353	4.851	5.094	4.968	6.180	5.576	5.251	5.305	5.213	6.371	5.385
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	39 MPH	0.	0.	0.	0.	0.	0.	0.4	0.	0.	0.	1.9	0.
	44 MPH	0.2	0.9	0.3	1.0	0.	0.	2.6	1.5	1.1	1.4	7.7	1.9
	49 MPH	3.0	3.4	3.3	3.8	0.	0.	11.0	7.1	8.5	6.9	19.2	7.7
	54 MPH	20.3	19.3	19.9	21.0	23.7	5.4	30.7	29.9	31.3	26.9	28.8	38.5
	59 MPH	61.4	58.4	61.5	60.0	60.5	45.9	73.2	70.6	72.2	71.0	76.9	69.2
	64 MPH	90.8	88.1	91.0	90.3	89.5	70.3	92.1	91.9	90.9	92.4	96.2	90.4
	69 MPH	98.8	97.6	98.6	99.3	100.0	83.8	99.6	99.0	99.4	98.6	100.0	100.0
	74 MPH	100.0	99.1	100.0	99.7	100.0	94.6	100.0	99.5	100.0	99.3	100.0	100.0
	79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DIRECTION: EB													
# OF VEHICLES		227	194	209	170	18	24	115	95	88	69	27	26
AVERAGE SPEED		58.68	59.32	58.63	58.63	59.22	64.21	57.06	58.09	57.31	58.23	56.26	57.73
DIRECTION: WB													
# OF VEHICLES		177	133	157	120	20	13	113	102	88	76	25	26
AVERAGE SPEED		57.71	57.89	57.71	57.86	57.65	58.15	56.18	55.89	56.51	56.08	55.00	55.35

TABLE A8:SPEED DATA

STATION: 4L-20 HIGHWAY: US 41 LOCATION: 1.0 MILE NORTH OF SR 2

NO. OF LANES: 4 TYPE OF SURFACE: ASPHALT WEATHER: CLEAR, BRIGHT

THIS OBSERVATION
DATE: 5/8/87
TIME: 10:25 AM

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: 5/23/86
TIME: 1:23 PM

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION		LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT
NUMBER OF VEHICLES		319	279	205	205	114	74	230	210	121	111	109	99
AVE. SPEED (MPH)		59.78	59.07	60.00	58.14	59.39	61.65	56.33	57.74	57.01	58.39	55.58	57.01
STANDARD DEVIATION		5.350	5.641	5.719	5.118	4.611	6.232	4.778	5.723	4.716	5.932	4.756	5.416
	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PERCENT	44 MPH	0.	0.7	0.	0.5	0.	1.4	1.3	1.0	0.	0.9	2.8	1.0
OF	49 MPH	0.9	4.3	1.0	5.4	0.9	1.4	7.4	8.1	5.0	6.3	10.1	10.1
VEHICLES	54 MPH	16.0	18.6	16.6	23.4	14.9	5.4	34.8	25.2	31.4	22.5	38.5	28.3
TRAVELING	59 MPH	49.2	52.0	48.3	55.6	50.9	41.9	77.0	62.4	73.6	60.4	80.7	64.6
LESS THAN	64 MPH	82.8	84.6	80.0	90.2	87.7	68.9	95.2	89.5	93.4	88.3	97.2	90.9
OR	69 MPH	95.6	96.4	94.6	99.5	97.4	87.8	99.1	97.1	99.2	94.6	99.1	100.0
EQUAL TO	74 MPH	98.7	99.3	98.0	100.0	100.0	97.3	99.6	100.0	99.2	100.0	100.0	100.0
	79 MPH	99.4	100.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DIRECTION: NB													
# OF VEHICLES		164	143	116	108	48	35	115	109	62	56	53	53
AVERAGE SPEED		59.40	57.29	59.74	56.63	58.58	59.34	55.04	55.37	56.32	56.32	53.55	54.36
DIRECTION: SB													
# OF VEHICLES		155	136	89	97	66	39	115	101	59	55	56	46
AVERAGE SPEED		60.18	60.94	60.34	59.82	59.97	63.72	57.62	60.30	57.73	60.49	57.50	60.07

TABLE A9:SPEED DATA

STATION: 4L-21 HIGHWAY: US 31 LOCATION: 0.8 MILE NORTH OF SR 38

NO. OF LANES: 4 TYPE OF SURFACE: ASPHALT WEATHER: BRIGHT, CLEAR

THIS OBSERVATION
DATE: 8/20/87
TIME: 1:01 PM

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: 8/13/86
TIME: 10:32 AM

	PASSENGER CARS						TRUCKS					
	ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT
NUMBER OF VEHICLES	382	281	317	230	65	51	186	204	125	128	61	76
AVE. SPEED (MPH)	58.59	58.92	58.46	59.00	59.25	58.55	56.76	57.25	56.56	57.79	57.18	56.33
STANDARD DEVIATION	4.551	5.083	4.288	5.315	5.654	3.890	4.541	5.139	4.532	5.558	4.570	4.222
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PERCENT 44 MPH	0.	0.	0.	0.	0.	0.	0.5	1.5	0.	0.8	1.6	2.6
OF 49 MPH	2.6	1.8	2.8	2.2	1.5	0.	5.9	3.4	5.6	3.9	6.6	2.6
VEHICLES 54 MPH	17.5	17.4	16.7	18.7	21.5	11.8	29.0	29.4	29.6	27.3	27.9	32.9
TRAVELING 59 MPH	59.4	58.7	60.3	58.7	55.4	58.8	72.0	72.1	74.4	69.5	67.2	76.3
LESS THAN 64 MPH	93.2	87.5	94.3	86.1	87.7	94.1	96.8	91.2	97.6	86.7	95.1	98.7
OR 69 MPH	98.7	98.2	99.7	97.8	93.8	100.0	100.0	98.5	100.0	97.7	100.0	100.0
EQUAL TO 74 MPH	99.5	98.9	99.7	98.7	98.5	100.0	100.0	99.5	100.0	99.2	100.0	100.0
79 MPH	99.5	100.0	99.7	100.0	98.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DIRECTION: NB												
# OF VEHICLES	183	131	145	108	38	23	90	106	56	61	34	45
AVERAGE SPEED	58.92	59.75	58.79	59.90	59.40	59.04	55.92	57.13	55.77	58.31	56.18	55.53
DIRECTION: SB												
# OF VEHICLES	199	150	172	122	27	28	96	98	69	67	27	31
AVERAGE SPEED	58.29	58.19	58.17	58.20	59.04	58.14	57.55	57.37	57.20	57.31	58.44	57.48

TABLE A10:SPEED DATA

STATION: 4L-32 HIGHWAY: US 30 LOCATION: 3.65 MILES WEST OF US 421

NO. OF LANES: 4 TYPE OF SURFACE: ASPHALT WEATHER: OVERCAST, BRIGHT

THIS OBSERVATION
DATE: 7/28/87
TIME: 2:26 PM

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: 8/14/86
TIME: 11:34 AM

	PASSENGER CARS						TRUCKS					
	ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT
NUMBER OF VEHICLES	315	263	210	164	105	99	200	207	103	97	97	110
AVE. SPEED (MPH)	59.47	59.67	58.82	59.03	60.78	60.72	58.38	57.98	57.83	57.59	58.96	58.32
STANDARD DEVIATION	4.074	4.976	3.985	4.654	3.952	5.326	4.709	4.356	5.174	4.972	4.108	3.719
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PERCENT 44 MPH	0.	0.4	0.	0.	0.	1.0	0.	0.	0.	0.	0.	0.
OF 49 MPH	0.3	1.5	0.5	1.8	0.	1.0	2.5	2.9	4.9	4.1	0.	1.8
VEHICLES 54 MPH	9.5	13.7	11.0	15.2	6.7	11.1	19.5	19.3	27.2	24.7	11.3	14.5
TRAVELING 59 MPH	52.1	50.6	60.5	56.1	35.2	41.4	57.0	65.7	63.1	71.1	50.5	60.9
LESS THAN 64 MPH	88.6	86.3	91.0	90.9	83.8	78.8	91.5	94.2	90.3	91.8	92.8	96.4
OR 69 MPH	99.4	95.8	99.5	97.6	99.0	92.9	98.5	99.0	97.1	97.9	100.0	100.0
EQUAL TO 74 MPH	100.0	99.6	100.0	100.0	100.0	99.0	100.0	99.5	100.0	99.0	100.0	100.0
79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DIRECTION: EB												
# OF VEHICLES	158	128	105	77	53	51	97	105	48	49	49	56
AVERAGE SPEED	59.50	59.37	58.90	59.05	60.70	59.84	58.24	58.22	57.71	58.37	58.76	58.09
DIRECTION: WB												
# OF VEHICLES	157	135	105	87	52	48	103	102	55	48	48	54
AVERAGE SPEED	59.45	59.95	58.74	59.01	60.87	61.65	58.51	57.73	57.94	56.79	59.17	58.56

TABLE A11:SPEED DATA

STATION: 2L-18 HIGHWAY: US 35 LOCATION: 1.9 MILES EAST OF I-69

NO. OF LANES: 2 TYPE OF SURFACE: ASPHALT WEATHER: SUNNY, BRIGHT

THIS OBSERVATION
DATE: 5/6/87
TIME: 11:55 AM

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: 8/13/86
TIME: 1:11 PM

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION		LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT
NUMBER OF VEHICLES		341	288	306	262	35	26	203	248	117	123	86	125
AVE. SPEED (MPH)		57.53	57.55	57.56	57.45	57.34	58.46	55.90	54.88	56.60	55.37	54.94	54.40
STANDARD DEVIATION		5.409	5.409	5.424	5.385	5.352	5.666	5.067	5.594	4.725	5.440	5.380	5.723
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	39 MPH	0.	0.	0.	0.	0.	0.	0.	0.4	0.	0.	0.	0.8
	44 MPH	0.6	0.7	0.7	0.8	0.	0.	2.5	4.8	1.7	4.1	3.5	5.6
	49 MPH	5.6	4.5	4.9	4.6	11.4	3.8	11.3	16.5	6.8	12.2	17.4	20.8
	54 MPH	27.9	31.9	27.8	32.4	28.6	26.9	35.5	44.0	28.2	43.1	45.3	44.8
	59 MPH	66.3	64.2	67.0	64.9	60.0	57.7	80.3	79.8	80.3	75.6	80.2	84.0
	64 MPH	88.3	91.3	88.2	91.6	88.6	88.5	95.6	97.2	94.9	95.9	96.5	98.4
	69 MPH	97.4	97.2	97.1	97.3	100.0	96.2	99.5	100.0	99.1	100.0	100.0	100.0
	74 MPH	100.0	99.7	100.0	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DIRECTION: EB													
# OF VEHICLES		147	137	131	130	16	7	93	122	53	59	40	63
AVERAGE SPEED		57.31	57.58	57.21	57.65	58.06	56.29	56.08	56.06	56.85	56.31	55.05	55.83
DIRECTION: WB													
# OF VEHICLES		194	151	175	132	19	19	110	126	64	64	46	62
AVERAGE SPEED		57.71	57.51	57.81	57.26	56.74	59.26	55.74	53.74	56.39	54.50	54.85	52.95

TABLE A12:SPEED DATA

STATION: 2L-54 HIGHWAY: US 231 LOCATION: 1.1 MILES SOUTH OF SR 234

NO. OF LANES: 2 TYPE OF SURFACE: WEATHER: BRIGHT, CLEAR

THIS OBSERVATION
DATE: 6/19/87
TIME: 10:42 AM

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: 6/23/86
TIME: 10:45 AM

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION		LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT
NUMBER OF VEHICLES		303	259	261	225	42	34	223	214	146	109	77	105
AVE. SPEED (MPH)		56.87	57.05	56.76	57.06	57.55	57.03	56.14	56.60	56.08	56.82	56.26	56.38
STANDARD DEVIATION		5.106	4.983	5.105	5.090	5.124	4.267	5.345	5.326	5.421	5.425	5.230	5.237
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	39 MPH	0.	0.4	0.	0.4	0.	0.	0.	0.5	0.	0.9	0.	0.
	44 MPH	0.7	1.9	0.8	2.2	0.	0.	1.8	1.4	2.1	0.9	1.3	1.9
	49 MPH	6.3	4.6	6.5	5.3	4.8	0.	9.4	7.0	10.3	6.4	7.8	7.6
	54 MPH	29.0	29.0	30.3	28.4	21.4	32.4	35.9	33.2	34.9	30.3	37.7	36.2
	59 MPH	73.3	72.6	73.2	72.0	73.8	76.5	75.3	72.4	77.4	69.7	71.4	75.2
	64 MPH	93.7	93.1	93.9	93.3	92.9	91.2	92.8	93.0	92.5	93.6	93.5	92.4
	69 MPH	98.3	99.2	98.9	99.1	95.2	100.0	99.6	99.1	99.3	99.1	100.0	99.0
	74 MPH	99.7	100.0	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DIRECTION: NB													
# OF VEHICLES		158	133	140	124	18	9	106	117	74	60	32	57
AVERAGE SPEED		56.95	56.50	56.76	56.63	58.44	54.67	55.62	55.80	55.42	55.93	56.09	55.67
DIRECTION: SB													
# OF VEHICLES		145	126	121	101	24	25	117	97	72	49	45	48
AVERAGE SPEED		56.79	57.64	56.77	57.58	56.88	57.88	56.62	57.57	56.76	57.90	56.38	57.23

TABLE A13:SPEED DATA

STATION: 2L-79 HIGHWAY: SR 25 LOCATION: 0.7 MILE SOUTH OF AMERICUS

NO. OF LANES: 2 TYPE OF SURFACE: ASPHALT WEATHER: BRIGHT, CLEAR

THIS OBSERVATION
DATE: 7/28/87
TIME: 10:17 AM

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: 6/4/86
TIME: 12:16 PM

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION		LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT
NUMBER OF VEHICLES		331	324	311	308	20	16	178	198	111	125	67	73
AVE. SPEED (MPH)		56.17	56.22	56.13	56.34	56.70	53.81	54.63	55.17	55.37	55.71	53.40	54.23
STANDARD DEVIATION		4.103	4.630	4.088	4.575	4.402	5.167	4.916	4.011	5.259	4.103	4.034	3.691
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	44 MPH	0.3	0.9	0.3	0.6	0.	6.3	2.8	0.5	2.7	0.8	3.0	0.
	49 MPH	3.0	6.2	2.9	5.8	5.0	12.5	12.4	7.6	10.8	5.6	14.9	11.0
	54 MPH	33.2	35.8	33.4	34.7	30.0	56.3	48.9	40.9	41.4	36.0	61.2	49.3
	59 MPH	82.5	76.2	83.0	75.3	75.0	93.8	88.2	83.8	85.6	78.4	92.5	93.2
	64 MPH	96.7	96.0	96.8	96.1	95.0	93.8	97.8	99.0	96.4	98.4	100.0	100.0
	69 MPH	99.4	99.4	99.4	99.4	100.0	100.0	98.3	100.0	97.3	100.0	100.0	100.0
	74 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DIRECTION: NB													
# OF VEHICLES		154	156	143	144	11	12	90	92	58	61	32	31
AVERAGE SPEED		56.57	56.24	56.52	56.45	57.18	53.67	55.21	55.22	55.57	55.92	54.56	53.84
DIRECTION: SB													
# OF VEHICLES		177	168	168	164	9	4	88	106	53	64	35	42
AVERAGE SPEED		55.82	56.20	55.80	56.25	56.11	54.25	54.03	55.12	55.15	55.52	52.34	54.52

TABLE A14:SPEED DATA

STATION: 2L-91 HIGHWAY: SR 43 LOCATION: 2.0 MILES SOUTH OF CHALMERS

NO. OF LANES: 2 TYPE OF SURFACE: ASPHALT WEATHER: BRIGHT, SUNNY

THIS OBSERVATION
DATE: 8/18/87
TIME: 9:45 AM

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: 7/31/86
TIME: 11:36 AM

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION		LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT
NUMBER OF VEHICLES		316	287	283	265	33	22	196	183	129	90	67	93
AVE. SPEED (MPH)		58.35	58.39	58.05	58.32	60.88	59.32	57.84	57.11	57.88	57.66	57.78	56.59
STANDARD DEVIATION		4.360	4.827	4.117	4.834	5.516	4.755	4.808	5.509	4.849	5.736	4.764	5.257
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	44 MPH	0.	0.	0.	0.	0.	0.	0.	1.1	0.	1.1	0.	1.1
	49 MPH	2.5	2.4	2.8	2.6	0.	0.	4.1	8.2	3.1	5.6	6.0	10.8
	54 MPH	16.1	19.9	17.3	20.0	6.1	18.2	21.4	31.1	19.4	30.0	25.4	32.3
	59 MPH	63.3	59.6	65.7	61.1	42.4	40.9	65.8	68.9	68.2	64.4	61.2	73.1
	64 MPH	93.0	89.9	94.0	89.8	84.8	90.9	92.9	91.3	91.5	90.0	95.5	92.5
	69 MPH	98.7	98.3	99.6	98.1	90.9	100.0	98.0	98.9	97.7	97.8	98.5	100.0
	74 MPH	99.4	99.7	100.0	99.6	93.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DIRECTION: NB													
# OF VEHICLES		176	144	153	126	23	18	96	85	65	43	31	42
AVERAGE SPEED		58.41	58.92	57.89	58.80	61.87	59.78	57.63	58.25	58.09	58.19	56.68	58.31
DIRECTION: SB													
# OF VEHICLES		140	143	130	139	10	4	100	98	64	47	36	51
AVERAGE SPEED		58.26	57.86	58.24	57.88	58.60	57.25	58.04	56.13	57.66	57.17	58.72	55.18

TABLE A15:SPEED DATA

STATION: UI-ALL HIGHWAY: URBAN INTERSTATE

THIS OBSERVATION
DATE: MAY TO JUNE 1987

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: JULY TO AUGUST 1986

	PASSENGER CARS						TRUCKS					
	ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT
NUMBER OF VEHICLES	755	744	546	589	209	155	486	462	260	239	226	223
AVE. SPEED (MPH)	60.16	60.52	60.10	60.34	60.33	61.22	58.97	59.16	59.72	60.24	58.11	57.99
STANDARD DEVIATION	4.670	4.471	4.895	4.567	4.031	4.028	4.480	4.150	4.789	4.179	3.932	3.797
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PERCENT 44 MPH	0.	0.	0.	0.	0.	0.	0.2	0.4	0.4	0.4	0.	0.4
OF 49 MPH	1.1	0.5	1.5	0.7	0.	0.	1.9	1.3	2.3	0.4	1.3	2.2
VEHICLES 54 MPH	10.6	7.3	11.7	8.5	7.7	2.6	14.6	13.0	13.1	8.8	16.4	17.5
TRAVELING 59 MPH	45.4	43.1	46.7	45.5	42.1	34.2	55.1	52.8	45.4	40.6	66.4	65.9
LESS THAN 64 MPH	83.3	83.9	83.0	84.0	84.2	83.2	89.7	91.3	84.6	85.8	95.6	97.3
OR 69 MPH	97.1	96.2	96.3	96.4	99.0	95.5	98.4	98.7	97.3	98.3	99.6	99.1
EQUAL TO 74 MPH	99.5	99.3	99.3	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
79 MPH	99.9	99.9	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A16:SPEED DATA

STATION: RI-ALL HIGHWAY: RURAL INTERSTATE

THIS OBSERVATION
DATE: MAY TO AUGUST 1987

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: MAY TO AUGUST 1986

	PASSENGER CARS						TRUCKS					
	ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT
NUMBER OF VEHICLES	1493	1195	927	640	566	555	839	780	465	392	374	388
AVE. SPEED (MPH)	60.54	62.92	60.30	62.50	60.94	63.40	59.33	61.43	59.87	61.86	58.66	60.99
STANDARD DEVIATION	4.176	4.722	4.163	4.705	4.170	4.699	4.137	4.517	4.410	4.820	3.667	4.150
24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
39 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PERCENT 44 MPH	0.1	0.	0.	0.	0.2	0.	0.	0.1	0.	0.	0.	0.3
OF 49 MPH	0.5	0.4	0.6	0.5	0.4	0.4	0.6	0.3	0.6	0.3	0.5	0.3
VEHICLES 54 MPH	6.0	4.7	6.4	5.5	5.3	3.8	9.7	6.7	8.4	7.9	11.2	5.4
TRAVELING 59 MPH	40.5	22.2	43.7	24.7	35.2	19.3	54.2	31.7	48.8	28.6	61.0	34.8
LESS THAN 64 MPH	84.9	60.9	86.0	64.1	83.2	57.3	88.8	75.5	85.6	69.6	92.8	81.4
OR 69 MPH	97.3	92.7	97.5	93.9	96.8	91.4	98.5	96.8	97.4	95.2	99.7	98.5
EQUAL TO 74 MPH	99.7	99.6	99.9	99.8	99.5	99.3	99.8	99.4	99.6	99.2	100.0	99.5
79 MPH	99.9	99.9	99.9	99.8	100.0	100.0	100.0	99.9	100.0	99.7	100.0	100.0
84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A17:SPEED DATA

STATION: 4L-ALL HIGHWAY: 4-LANE

THIS OBSERVATION
DATE: MAY TO AUGUST 1987

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: MAY TO AUGUST 1986

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION		LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT
NUMBER OF VEHICLES		1420	1150	1098	889	322	261	844	818	525	481	319	337
AVE. SPEED (MPH)		58.96	59.07	58.74	58.58	59.70	60.75	56.99	57.49	57.03	57.68	56.92	57.21
STANDARD DEVIATION		4.768	5.281	4.758	5.087	4.735	5.588	4.996	5.148	4.975	5.437	5.038	4.699
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	39 MPH	0.	0.	0.	0.	0.	0.	0.1	0.	0.	0.	0.3	0.
	44 MPH	0.1	0.5	0.1	0.4	0.	0.8	1.2	1.0	0.4	0.8	2.5	1.2
	49 MPH	1.8	2.8	2.2	3.4	0.6	0.8	6.9	5.4	6.3	5.4	7.8	5.3
	54 MPH	16.2	17.4	16.7	19.9	14.6	8.8	28.8	25.9	30.1	25.6	26.6	26.4
	59 MPH	56.1	55.1	58.5	57.9	47.8	45.6	70.1	67.6	71.2	68.2	68.3	66.8
	64 MPH	89.2	86.7	89.9	89.3	86.6	77.8	93.8	91.7	93.0	89.8	95.3	94.4
	69 MPH	98.2	97.0	98.4	98.7	97.5	91.6	99.3	98.4	99.0	97.3	99.7	100.0
	74 MPH	99.6	99.2	99.5	99.6	99.7	98.1	99.9	99.6	99.8	99.4	100.0	100.0
	79 MPH	99.7	100.0	99.7	100.0	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A18:SPEED DATA

STATION: 2L-ALL HIGHWAY: 2-LANE

THIS OBSERVATION
DATE: MAY TO AUGUST 1987

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: JUNE TO AUGUST 1986

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION		LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT	LAST	PRESENT
NUMBER OF VEHICLES		1291	1158	1161	1060	130	98	800	843	503	447	297	396
AVE. SPEED (MPH)		57.23	57.27	57.12	57.26	58.21	57.40	56.16	55.87	56.51	56.28	55.58	55.41
STANDARD DEVIATION		4.839	5.019	4.766	5.006	5.368	5.177	5.163	5.250	5.150	5.219	5.141	5.252
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	39 MPH	0.	0.1	0.	0.1	0.	0.	0.	0.2	0.	0.2	0.	0.3
	44 MPH	0.4	0.9	0.4	0.8	0.	1.0	1.8	2.1	1.6	1.8	2.0	2.5
	49 MPH	4.3	4.5	4.2	4.6	5.4	3.1	9.3	10.2	7.8	7.6	11.8	13.1
	54 MPH	26.6	29.4	27.3	29.2	20.8	31.6	35.1	37.7	30.8	35.3	42.4	40.4
	59 MPH	71.3	68.3	72.4	68.5	62.3	66.3	77.1	76.5	77.5	72.7	76.4	80.8
	64 MPH	92.9	92.7	93.2	92.8	90.0	90.8	94.6	95.3	93.6	94.9	96.3	95.7
	69 MPH	98.5	98.5	98.7	98.5	96.2	99.0	98.9	99.5	98.4	99.3	99.7	99.7
	74 MPH	99.8	99.8	99.9	99.8	98.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	79 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A19:SPEED DATA

STATION: ALL-14 HIGHWAY: URBAN INTERSTATE
RURAL INTERSTATE
4-LANE
2-LANE

THIS OBSERVATION
DATE: MAY TO AUGUST 1987

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: MAY TO AUGUST 1986

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION		LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT
NUMBER OF VEHICLES		4959	4247	3732	3178	1227	1069	2969	2903	1753	1559	1216	1344
AVE. SPEED (MPH)		59.17	59.92	58.82	59.26	60.22	61.89	57.75	58.34	58.03	58.72	57.35	57.90
STANDARD DEVIATION		4.783	5.374	4.817	5.262	4.518	5.220	4.917	5.321	5.082	5.503	4.640	5.069
PERCENT OF VEHICLES TRAVELING LESS THAN OR EQUAL TO	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	39 MPH	0.	0.0	0.	0.0	0.	0.	0.	0.1	0.	0.1	0.1	0.1
	44 MPH	0.1	0.4	0.2	0.4	0.1	0.3	0.8	1.0	0.6	0.8	1.2	1.2
	49 MPH	2.0	2.2	2.3	2.7	0.9	0.7	4.9	4.8	4.6	4.0	5.3	5.7
	54 MPH	15.0	15.3	16.7	18.0	9.8	7.4	22.8	22.1	22.0	21.4	23.8	23.0
	59 MPH	53.7	47.4	57.4	52.5	42.5	32.2	65.1	58.2	63.3	55.3	67.7	61.5
	64 MPH	88.0	80.6	88.9	84.4	85.0	69.1	92.0	88.3	90.0	85.6	94.8	91.5
	69 MPH	97.8	96.1	98.0	97.2	97.3	92.7	98.8	98.3	98.2	97.5	99.7	99.3
	74 MPH	99.7	99.5	99.7	99.6	99.5	99.2	99.9	99.7	99.8	99.6	100.0	99.9
	79 MPH	99.9	100.0	99.9	99.9	99.9	100.0	100.0	100.0	100.0	99.9	100.0	100.0
	84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A20:SPEED DATA

STATION: RURALL HIGHWAY: RURAL INTERSTATE
4-LANE
2-LANE

THIS OBSERVATION
DATE: MAY TO AUGUST 1987

LAST PREVIOUS OBSERVATION (SPEED REPORT NO. 120)
DATE: MAY TO AUGUST 1986

		PASSENGER CARS						TRUCKS					
		ALL		INDIANA		NON-INDIANA		ALL		<5000 LBS.		>5000 LBS.	
OBSERVATION		LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT	LAST	PRES-ENT
NUMBER OF VEHICLES		4204	3503	3186	2589	1018	914	2483	2441	1493	1320	990	1121
AVE. SPEED (MPH)		58.99	59.79	58.60	59.01	60.20	62.00	57.51	58.19	57.74	58.45	57.18	57.88
STANDARD DEVIATION		4.782	5.538	4.771	5.378	4.614	5.390	4.964	5.502	5.076	5.667	4.771	5.286
	24 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	29 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	34 MPH	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	39 MPH	0.	0.0	0.	0.0	0.	0.	0.	0.1	0.	0.1	0.1	0.1
PERCENT	44 MPH	0.2	0.5	0.2	0.5	0.1	0.3	1.0	1.1	0.7	0.9	1.4	1.3
OF	49 MPH	2.1	2.5	2.5	3.2	1.1	0.8	5.5	5.4	5.0	4.6	6.3	6.3
VEHICLES	54 MPH	15.8	17.0	17.5	20.1	10.2	8.2	24.4	23.8	23.6	23.6	25.6	24.1
TRAVELING	59 MPH	55.2	48.2	59.2	54.0	42.6	31.8	67.0	59.2	66.4	58.0	68.0	60.7
LESS THAN	64 MPH	88.8	79.9	90.0	84.5	85.2	66.7	92.4	87.8	90.9	85.5	94.6	90.4
OR	69 MPH	97.9	96.1	98.2	97.4	97.0	92.2	98.9	98.3	98.3	97.3	99.7	99.4
EQUAL TO	74 MPH	99.7	99.5	99.8	99.7	99.4	99.0	99.9	99.7	99.8	99.5	100.0	99.8
	79 MPH	99.9	100.0	99.9	100.0	99.9	100.0	100.0	100.0	100.0	99.9	100.0	100.0
	84 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 MPH	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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